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ABSTRACT

This digest focuses on academic testing and American Indian and Alaska Native (AI/AN) students. Ideally, test results should be used to improve student learning. Proponents of high-stakes testing say it is needed to measure student achievement and school quality and to hold students and teachers accountable. High-stakes testing is also used to publicly compare schools and districts; to determine entrance into particular programs, schools, or colleges; as criteria for promotion or graduation; and to make decisions about resource allocation. Opponents of testing argue that current testing programs do not provide valid or reliable information, especially for low-income and minority students, and have unintended, negative consequences. Nationally, AI/AN students have scored well below White and other minority groups of students on standardized tests of reading, language, and mathematics. Testing of AI/AN students has been a concern for years, as AI/AN cultures and languages were long considered obstacles to achievement, and the performance of White students was the benchmark for all. Standardized tests fail to consider the vast diversity of AI/AN languages and cultures, leading to serious issues regarding cultural bias, content comparability, norming of tests, and test validity. Other issues include environmental factors; student physical or emotional health; risk-taking behaviors of youth; and poorly funded, low-quality schools serving AI/AN students. Nine strategies are listed for improving test scores of special populations, including AI/AN students. (SV)

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The Use of Academic Achievement Tests and Measurements with American Indian and Alaska Native Students

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Although there long has been research and interest in how well American Indians and Alaska Natives (AI/AN) perform on standardized tests, the current emphasis on test scores as the major measure of student academic success in schools creates a sense of urgency to know more and to find ways for students to achieve higher scores. The stakes are high for students, schools, and communities given the current national focus on accountability, standards, and student assessment. The No Child Left Behind Act of 2001 (NCLB) has resulted in the reality that every child will be tested often and that all schools will be held accountable with consequences if adequate yearly progress is not made on student test scores and other educational data.

This Digest focuses on academic testing and AI/AN students. Topics covered include the use of test results, student performance on tests, the identification of major test issues, and suggestions to improve test scores.

Indian Education Learning Environment

Approximately 90% of the 500,000 AI/AN students in K-12 education attend public schools, while about 49,000 students attend Bureau of Indian Affairs (BIA) supported schools

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(citation??). The NCLB with its emphasis on adequate yearly progress (AYP), public accountability, and categorizing schools that do not meet AYP as *school improvement, corrective action* or *restructuring* schools puts a lot of pressure on schools to have their students do well on standardized tests.

The learning environment is quite complex for AI/AN students and their teachers, given the assimilation approach to Indian education, the types and locations of schools, and the cultural and linguistic diversity (over 200 languages) found in the approximately 600 federally and state recognized tribes.

Test Use

Ideally, test results should be used to improve learning for all students (Fox, 2001; Gollnick & Chinn, 1998). Proponents of testing identify three reasons why high-stakes testing is needed: "1) to measure student achievement, 2) to provide information about the quality of schools, and 3) to hold students and educators accountable" (Jones, Jones & Hargrove, 2003, p.10). High-stakes testing is also used to publicly compare teachers, schools, and school districts. Testing has been used to determine entrance into gifted and special education programs, advanced courses, colleges and universities, and professional schools (Gollnick & Chinn, 1998); as criteria for grade promotion and high school graduation; and to make decisions about how to allocate resources (Stiggins, 2001).

Opponents of testing argue that current testing programs do not provide valid or reliable information, especially for English language learners, low socioeconomic status (SES) students, and ethnic and cultural groups. In fact, there are a number of unintended negative consequences for students, e.g., "labeling students, teachers, and schools as low performing, narrowing of the curriculum" (Jones, et al., 2003, p.171). Barton (1999) in an ETS publication, states "the way tests are used in practice in elementary and secondary schools—of rewarding and punishing schools, closing schools, and judging educational progress—is often appallingly primitive" (p. 21).

How Do AI/ANs Perform on Tests?

Since test results have multiple uses, it is critical that AI/AN students do well if Indian education is to improve. Although a number of AI/AN students perform exceptionally well on standardized tests, the reality is that too many do not. In 1988 the BIA reported that their students scored well below the national mean of other students on standardized tests in reading, language, and mathematics (Bureau of Indian Affairs, 1988). The 2002-2003 BIA Report Card showed 54.0% and 50.5% of their students at the proficient or advanced levels in math and language arts respectively (Bureau of Indian Affairs, 2003). Test performance for Whites was higher on the National Assessment of Educational Progress (NAEP) in mathematics and science at grades

4, 8, and 12 compared to AI/AN students, although AN/AN scored higher than Hispanics and Blacks in both areas (National Center for Education Statistics, 2002; 2003).

Historical Considerations

Testing has been a concern for years. The Meriam Report (Institute for Government Research, 1928) found that there was little measurement and testing going on, especially in government Indian schools. The study identified a possible danger and cautioned that "testing, particularly intelligence testing, should never be used in a school as a means of denying opportunity, but only as a means of directing opportunities more wisely" (p. 380). The point is to use testing to meet the needs of students and develop their potential, not to deny educational opportunities by using test results to label "Indian children as not being worthy of an education beyond the grades" (p. 380).

In the 1950's, the BIA acknowledged the importance of the relationship between AI/AN culture and language and student achievement, but from an assimilation and cultural deficit perspective. Anderson, Collister, and Ladd (1953) stated "that as the cultural and educational backgrounds of Indian children become more like those of White children in public schools, the more closely will the educational achievement of Indian children match that of White children" (p.79). It was clear that testing results would not only be used to compare Indian students in

different school types, but also the performance of White students would be the benchmark when comparisons are made.

Today, members of the dominant White group continue to have higher scores than members of historically oppressed groups, including AI/ANs. The achievement gap between Whites and AI/ANs continues to be wide although AI/AN students have performed better in recent years.

Measurement and Testing Issues that Need to be Addressed

Standardized testing fails to consider the vast diversity of AI/AN cultures and languages (Bordeaux, 1995). If tribal languages and cultures are ignored, then cultural bias, content comparability, the norming of tests, and test validity and authenticity become serious issues (Lomawaima & McCarty, 2002; Padilla & Lindholm, 1995; Fox, 2001). McInerney (1992) contends using test scores leads to flawed research since the studies did not establish that the "behaviors and responses being measured were functionally, conceptually or metrically equivalent to those from which norms for comparisons were drawn, and that the constructs and tools used were culturally appropriate" (p. 2).

Jordan, French, and Tempest (1997) found that environmental factors, emotional trauma, and physical or health factors have been correlated to underachievement of AI/AN students. SixKiller Clarke (2002) identified AI/AN youth risk factors associated with peer group high risk taking behaviors, family situations,

community economic and social distress situations, and factors that lead to dropping out of school. These factors of low SES, dysfunctional families, and poor health conditions need to be considered when testing AI/AN students. SES is critical, since there is a correlation between successful standardized test results and SES (Fox, 1999).

Other factors in education influence student success. Not only is there the history of education systems that tried to do away with Indian culture and values (Association of Community Tribal Schools, 1996), but there are a host of other issues that influence teaching and learning. Examples include the lack of funding, the need for quality teachers and administrators, meaningful parent involvement, the integration of language and culture in the curriculum, attendance and dropouts rates, and discipline and behavior incidents. Gollnick and Chinn (1998) contend that low-income and minority students are less likely to have their classes taught by teachers who majored in the fields they are teaching; more likely to lack sufficient books and other reading materials; more likely to be taught a low-level curriculum with low performance standards; and less likely to take advanced math, earn a high school diploma, or to go to college.

The assessment of AI/AN special education students is also an issue. Tippeconnic and Faircloth (2002) discuss the overrepresentation of AI/AN students receiving special education

services and the need for culturally and linguistically appropriate assessment to determine if students have "a language-related disability or if the student's academic difficulties are related to a lack of competence in the English language" (p. 2).

What Can Be Done?

Jones et al. (2003) suggest strategies that can be used to improve test results for special populations, including AI/AN students:

- Allow students who are not proficient to get extra help after school or during the summer.
- Allow special testing accommodations for special needs students.
- Recruit, employ, and retain competent faculty members who reflect the diversity of the student population.
- Provide meaningful professional development opportunities to enable teachers and administrators to work effectively with diverse learners.
- Invite successful minority adults to serve as role models for young minority students.
- Provide data from statewide testing programs that can be used to inform planning and instruction.
- Embrace the notion that learning must be demonstrated through tasks that are real and not just measured by regurgitating facts (performance-based assessment is

suggested).

- Align assessment with curriculum and classroom instruction, to make sure the tests match what is taught in the classroom.
- Always use multiple methods of assessment when making high-stakes decisions (pp. 119-121).

A Final Word

Even during the era of high-stakes testing, efforts should continue to develop and use performance-based assessment (Jones et al. 2003; Fox, 1999; Bordeaux, 1995) to affect the instruction of teachers to truly meet the educational needs of AI/AN students.

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